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IN THE CLAIMS

CLAIM 1. (Cancelled)

CLAIM 2. (Currently Amended) The electrochemical cell of claim 34 wherein the electrically conductive member and the compression member are continuous structures concentrically arranged to form the pressure pad.

CLAIM 3. (Currently Amended) The An electrochemical cell of claim 1, comprising:  
a first electrode;  
a second electrode;  
a membrane disposed between the first electrode and the second electrode; and  
a pressure pad disposed in electrical communication with the first electrode and  
being configured to support the first electrode, the second electrode, and the membrane, the  
pressure pad comprising,  
an electrically conductive member, and  
a compression member disposed at the electrically conductive member;  
wherein the electrically conductive member and the compression member  
are spirally arranged to form the pressure pad.

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CLAIM 4. (Currently Amended) The An electrochemical cell, of claim 1 comprising:

a first electrode;

a second electrode;

a membrane disposed between the first electrode and the second electrode; and  
a pressure pad disposed in electrical communication with the first electrode and  
being configured to support the first electrode, the second electrode, and the membrane, the  
pressure pad comprising,

an electrically conductive member, and

a compression member disposed at the electrically conductive member;

wherein the electrically conductive member comprises a plate, the plate  
being configured to include plurality of raised portions concentrically disposed thereon, the  
raised portions being configured to receive compression members therebetween.

CLAIM 5. (Currently Amended) The electrochemical cell of claim 43 wherein the compression member is longitudinally disposed within the electrically conductive member.

CLAIM 6. (Currently Amended) The electrochemical cell of claim 43 wherein the electrically conductive member is compressible.

CLAIM 7. (Currently Amended) The electrochemical cell of claim 43 wherein the pressure pad is porous.

CLAIM 8. (Currently Amended) The electrochemical cell of claim 43 wherein the electrically conductive member is fabricated from comprises a material selected from the group consisting of copper, silver, gold, aluminum, niobium, zirconium, tantalum, titanium, iron, nickel, cobalt, hafnium, tungsten, alloys of the foregoing materials, superalloys of the foregoing materials, electrically conductive polymers, and combinations of the foregoing materials.

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CLAIM 9. (Currently Amended) The electrochemical cell of claim 43 wherein the electrically conductive member is fabricated of comprise electrically conductive carbon.

CLAIM 10. (Currently Amended) The electrochemical cell of claim 43 wherein the compression member is fabricated from comprises an elastomeric material.

CLAIM 11. (Original) The electrochemical cell of claim 10 wherein the elastomeric material is selected from the group consisting of silicones, fluorosilicones, fluoroelastomers, and combinations of the foregoing materials.

CLAIM 12 - 42. (Cancelled)

CLAIM 43. (New) The electrochemical cell of claim 8 wherein the material is selected from the group consisting of gold, aluminum, niobium, zirconium, tantalum, titanium, iron, cobalt, hafnium, tungsten, alloys of the foregoing materials, superalloys of the foregoing materials, and combinations of the foregoing materials.

CLAIM 44. (New) The electrochemical cell of claim 43 wherein the material is selected from the group consisting of niobium, tantalum, titanium, cobalt, hafnium, tungsten, alloys of the foregoing materials, superalloys of the foregoing materials, and combinations of the foregoing materials.

CLAIM 45. (New) The electrochemical cell of claim 3 wherein the electrically conductive member comprises titanium.

CLAIM 46. (New) The electrochemical cell of claim 3 wherein the electrically conductive member comprises a material selected from the group consisting of electrically conductive carbon, electrically conductive polymers, and electrically conductive graphite, alloys of the foregoing materials, superalloys of the foregoing materials, and combinations of the foregoing materials.

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CLAIM 47. (New) The electrochemical cell of claim 4 wherein the electrically conductive member is compressible.

CLAIM 48. (New) The electrochemical cell of claim 4 wherein the pressure pad is porous.

CLAIM 49. (New) The electrochemical cell of claim 4 wherein the electrically conductive member comprises a material selected from the group consisting of copper, silver, gold, aluminum, niobium, zirconium, tantalum, titanium, iron, nickel, cobalt, hafnium, tungsten, alloys of the foregoing materials, superalloys of the foregoing materials, electrically conductive polymers, and combinations of the foregoing materials.

CLAIM 50. (New) The electrochemical cell of claim 49 wherein the material is selected from the group consisting of gold, aluminum, niobium, zirconium, tantalum, titanium, iron, cobalt, hafnium, tungsten, alloys of the foregoing materials, superalloys of the foregoing materials, and combinations of the foregoing materials.

CLAIM 51. (New) The electrochemical cell of claim 50 wherein the material is selected from the group consisting of niobium, tantalum, titanium, cobalt, hafnium, tungsten, alloys of the foregoing materials, superalloys of the foregoing materials, and combinations of the foregoing materials.

CLAIM 52. (New) The electrochemical cell of claim 4 wherein the electrically conductive member comprises titanium.

CLAIM 53. (New) The electrochemical cell of claim 4 wherein the electrically conductive member comprises a material selected from the group consisting of electrically conductive carbon, electrically conductive polymers, and electrically conductive graphite, alloys of the foregoing materials, superalloys of the foregoing materials, and combinations of the foregoing materials.

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CLAIM 54. (New) The electrochemical cell of claim 4 wherein the electrically conductive member comprises electrically conductive carbon.

CLAIM 55. (New) The electrochemical cell of claim 4 wherein the compression member comprises an elastomeric material.

CLAIM 56. (New) The electrochemical cell of claim 55 wherein the elastomeric material is selected from the group consisting of silicones, fluorosilicones, fluoroelastomers, and combinations of the foregoing materials.

CLAIM 57. (New) The electrochemical cell of claim 4 wherein the raised portions are concentrically disposed on a first major surface of the plate and on an opposing second major surface of the plate.

CLAIM 58. (New) The electrochemical cell of claim 57 wherein the raised portions concentrically disposed on the first major surface of the plate register with spaces between the raised portions concentrically disposed on the second major surface of the plate.

CLAIM 59. (New) The electrochemical cell of claim 57 wherein the plate includes an interruption extending radially outward from a hub disposed substantially at a center of the plate, the interruption being configured to provide a flexibility to the plate.

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CLAIM 60. (New) An electrochemical cell, comprising:

a first electrode;

a second electrode;

a membrane disposed between the first electrode and the second electrode; and

a pressure pad disposed in electrical communication with the first electrode and

being configured to support the first electrode, the second electrode, and the membrane, the

pressure pad comprising,

an electrically conductive member, and

a compression member disposed at the electrically conductive member;

wherein the electrically conductive member comprises a plate, the plate

being configured to include plurality of raised portions annularly disposed thereon, the raised

portions being configured to receive compression members therebetween.

CLAIM 61. (New) The electrochemical cell of claim 60 wherein the electrically conductive

member comprises electrically conductive carbon.

CLAIM 62. (New) The electrochemical cell of claim 60 wherein the electrically conductive

member is compressible.

CLAIM 63. (New) The electrochemical cell of claim 60 wherein the pressure pad is porous.

CLAIM 64. (New) The electrochemical cell of claim 60 wherein the electrically conductive

member comprises a material selected from the group consisting of copper, silver, gold,

aluminum, niobium, zirconium, tantalum, titanium, iron, nickel, cobalt, hafnium, tungsten, alloys

of the foregoing materials, superalloys of the foregoing materials, electrically conductive

polymers, and combinations of the foregoing materials.

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CLAIM 65. (New) The electrochemical cell of claim 64 wherein the material is selected from the group consisting of gold, aluminum, niobium, zirconium, tantalum, titanium, iron, cobalt, hafnium, tungsten, alloys of the foregoing materials, superalloys of the foregoing materials, and combinations of the foregoing materials.

CLAIM 66. (New) The electrochemical cell of claim 65 wherein the material is selected from the group consisting of niobium, tantalum, titanium, cobalt, hafnium, tungsten, alloys of the foregoing materials, superalloys of the foregoing materials, and combinations of the foregoing materials.

CLAIM 67. (New) The electrochemical cell of claim 60 wherein the electrically conductive member comprises titanium.

CLAIM 68. (New) The electrochemical cell of claim 60 wherein the electrically conductive member comprises a material selected from the group consisting of electrically conductive carbon, electrically conductive polymers, and electrically conductive graphite, alloys of the foregoing materials, superalloys of the foregoing materials, and combinations of the foregoing materials.

CLAIM 69. (New) The electrochemical cell of claim 60 wherein the compression member comprises an elastomeric material.

CLAIM 70. (New) The electrochemical cell of claim 69 wherein the elastomeric material is selected from the group consisting of silicones, fluorosilicones, fluoroelastomers, and combinations of the foregoing materials.

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